

RAW SEQUENCE LISTING

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Application Serial Number: 10/570,904B
Source: FWO
Date Processed by STIC: 1/30/07

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IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/570,904B

DATE: 01/30/2007

TIME: 08:42:54

Input Set : N:\efs\01_29_07\10570904b_efs\CorrectedSequenceListing-

3rd.txt

Output Set: N:\CRF4\01302007\J570904B.raw

3 <110> APPLICANT: TAKESHIMA, Seiji
 4 MATSUMURA, Tadanobu
 5 KISHIMOTO, Takahide
 6 OKA, Masanori
 7 HIRAYAMA, Noriaki
 9 <120> TITLE OF INVENTION: MODIFIED PYRROLOQUINOLINE QUINONE (PQQ) DEPENDENT GLUCOSE
 DEHYDROGENASE
 10 EXCELLENT IN SUBSTRATE SPECIFICITY
 12 <130> FILE REFERENCE: 251134
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/570,904B
 C--> 14 <141> CURRENT FILING DATE: 2006-03-07
 14 <150> PRIOR APPLICATION NUMBER: PCT/JP2004/012508
 15 <151> PRIOR FILING DATE: 2004-08-31
 17 <150> PRIOR APPLICATION NUMBER: JP 2003-315797
 18 <151> PRIOR FILING DATE: 2003-09-08
 20 <150> PRIOR APPLICATION NUMBER: JP 2003-315799
 21 <151> PRIOR FILING DATE: 2003-09-08
 23 <150> PRIOR APPLICATION NUMBER: JP 2004-060283
 24 <151> PRIOR FILING DATE: 2004-03-04
 26 <150> PRIOR APPLICATION NUMBER: JP 2004-060282
 27 <151> PRIOR FILING DATE: 2004-03-04
 29 <150> PRIOR APPLICATION NUMBER: JP 2004-151905
 30 <151> PRIOR FILING DATE: 2004-05-21
 32 <160> NUMBER OF SEQ ID NOS: 94
 34 <170> SOFTWARE: PatentIn version 3.1
 36 <210> SEQ ID NO: 1
 37 <211> LENGTH: 455
 38 <212> TYPE: PRT
 39 <213> ORGANISM: Acinetobacter baumannii
 41 <400> SEQUENCE: 1
 43 Asp Ile Pro Leu Thr Pro Ala Gln Phe Ala Lys Ala Lys Thr Glu Asn
 44 1 5 10 15
 47 Phe Asp Lys Lys Val Ile Leu Ser Asn Leu Asn Lys Pro His Ala Leu
 48 20 25 30
 51 Leu Trp Gly Pro Asp Asn Gln Ile Trp Leu Thr Glu Arg Ala Thr Gly
 52 35 40 45
 55 Lys Ile Leu Arg Val Asn Pro Val Ser Gly Ser Ala Lys Thr Val Phe
 56 50 55 60
 59 Gln Val Pro Glu Ile Val Ser Asp Ala Asp Gly Gln Asn Gly Leu Leu
 60 65 70 75 80
 63 Gly Phe Ala Phe His Pro Asp Phe Lys His Asn Pro Tyr Ile Tyr Ile
 64 85 90 95
 67 Ser Gly Thr Phe Lys Asn Pro Lys Ser Thr Asp Lys Glu Leu Pro Asn

See p. 7

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71 Gln Thr Ile Ile Arg Arg Tyr Thr Tyr Asn Lys Thr Thr Asp Thr Phe
 72 115 120 125
 75 Glu Lys Pro Ile Asp Leu Ile Ala Gly Leu Pro Ser Ser Lys Asp His
 76 130 135 140
 79 Gln Ser Gly Arg Leu Val Ile Gly Pro Asp Gln Lys Ile Tyr Tyr Thr
 80 145 150 155 160
 83 Ile Gly Asp Gln Gly Arg Asn Gln Leu Ala Tyr Leu Phe Leu Pro Asn
 84 165 170 175
 87 Gln Ala Gln His Thr Pro Thr Gln Gln Glu Leu Asn Ser Lys Asp Tyr
 88 180 185 190
 91 His Thr Tyr Met Gly Lys Val Leu Arg Leu Asn Leu Asp Gly Ser Val
 92 195 200 205
 95 Pro Lys Asp Asn Pro Ser Phe Asn Gly Val Val Ser His Ile Tyr Thr
 96 210 215 220
 99 Leu Gly His Arg Asn Pro Gln Gly Leu Ala Phe Ala Pro Asn Gly Lys
 100 225 230 235 240
 103 Leu Leu Gln Ser Glu Gln Gly Pro Asn Ser Asp Asp Glu Ile Asn Leu
 104 245 250 255
 107 Val Leu Lys Gly Gly Asn Tyr Gly Trp Pro Asn Val Ala Gly Tyr Lys
 108 260 265 270
 111 Asp Asp Ser Gly Tyr Ala Tyr Ala Asn Tyr Ser Ala Ala Thr Asn Lys
 112 275 280 285
 115 Ser Gln Ile Lys Asp Leu Ala Gln Asn Gly Ile Lys Val Ala Thr Gly
 116 290 295 300
 119 Val Pro Val Thr Lys Glu Ser Glu Trp Thr Gly Lys Asn Phe Val Pro
 120 305 310 315 320
 123 Pro Leu Lys Thr Leu Tyr Thr Val Gln Asp Thr Tyr Asn Tyr Asn Asp
 124 325 330 335
 127 Pro Thr Cys Gly Glu Met Ala Tyr Ile Cys Trp Pro Thr Val Ala Pro
 128 340 345 350
 131 Ser Ser Ala Tyr Val Tyr Thr Gly Gly Lys Lys Ala Ile Pro Gly Trp
 132 355 360 365
 135 Glu Asn Thr Leu Leu Val Pro Ser Leu Lys Arg Gly Val Ile Phe Arg
 136 370 375 380
 139 Ile Lys Leu Asp Pro Thr Tyr Ser Thr Thr Leu Asp Asp Ala Ile Pro
 140 385 390 395 400
 143 Met Phe Lys Ser Asn Asn Arg Tyr Arg Asp Val Ile Ala Ser Pro Glu
 144 405 410 415
 147 Gly Asn Thr Leu Tyr Val Leu Thr Asp Thr Ala Gly Asn Val Gln Lys
 148 420 425 430
 151 Asp Asp Gly Ser Val Thr His Thr Leu Glu Asn Pro Gly Ser Leu Ile
 152 435 440 445
 155 Lys Phe Thr Tyr Asn Gly Lys
 156 450 455
 159 <210> SEQ ID NO: 2
 160 <211> LENGTH: 1368
 161 <212> TYPE: DNA
 162 <213> ORGANISM: Acinetobacter baumannii
 164 <400> SEQUENCE: 2

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165	gatataccctc tgacacctgc tcagttcgca aaagcgaaaa cagaaaattt tgataaaaaaa	60
167	gtgattctgt ccaatttaaa taaaccacat gctttgttat gggggccaga taatcaaatt	120
169	tggtaaccg aacgtgcaac tggcaaattt ttaagagtaa atcctgtatc tggtagcgcg	180
171	aaaacagtat ttccagggtcc tgaatttgt agtgatgctg atggcaaaa tgggttgtt	240
173	ggtttgtt ctcattcctga cttaaacat aaccctata tctatatttc aggactttt	300
175	aaaaatccaa aatctacaga taaagagta cctaattcaga cgattattcg tagatatacc	360
177	tataataaaaa ctacagatac atttgaaaag cctattgatt tgattgcagg tttaccgtca	420
179	tcaaaagatc atcagtctgg tgcgtctcgtt attggccag accaaaaaat ctactatacg	480
181	atgggtgacc aaggcgttaa tcagttatc tatctgttct taccgaatca ggcacagcat	540
183	actccgactc agcaagagct caatagtaaa gactaccata catatatggg taaagtatta	600
185	cgtttaaattc tggacggcag tgtacctaaa gacaacccaa gctttaacgg cgtatgtgagt	660
187	catatctaca cttagggca ccgtaatcca caaggtttag catttgcccc aatggaaag	720
189	cttttacaat ctgagcaagg accaaatttct gatgatggaa ttaaccttgtt attaaaaggt	780
191	ggttaactatg gctggccaaa tgtacgttgt tataaagatg acagtggta tgccatgca	840
193	aactattcgg cagcaaccaa taaatcacaa attaaagatt tagctcaaaa cggataaaaa	900
195	gtagcaacag gtgttctgt gactaaagag tctgaatggc ctggtaaaaaa ctttgtccg	960
197	cctttgaaaaa ctttatatac ggtacaagat acctataact ataatgaccc tacttgttgt	1020
199	gagatggcat atatttgcg gccaacgggt gcaccgtcat cagcatatgt atatacggga	1080
201	ggcaaaaaag cgattccagg gtggggaaaat acattattgg tcccatctt aaaaacgtggg	1140
203	gtgatttcc gtattaaatt ggacccgaca tatagcacga ctttggatga tgctatccca	1200
205	atgtttaaaa gcaataaccg ttatcgat gtcatcgcta gtccagaagg taatacctta	1260
207	tatgtgctga ctgatacagc ggggaatgta caaaaagatg atgggttgtt cactcatact	1320
209	ttagagaatc ccggttctct cattaaattt acatataacg gtaagtaa	1368
212	<210> SEQ ID NO: 3	
213	<211> LENGTH: 33	
214	<212> TYPE: DNA	
215	<213> ORGANISM: Artificial Sequence	
217	<220> FEATURE:	
218	<223> OTHER INFORMATION: Artificial Sequence oligonucleotide	
220	<400> SEQUENCE: 3	
221	agtgtatgctg atgggataaa tgggttgtt ggt	33
224	<210> SEQ ID NO: 4	
225	<211> LENGTH: 33	
226	<212> TYPE: DNA	
227	<213> ORGANISM: Artificial Sequence	
229	<220> FEATURE:	
230	<223> OTHER INFORMATION: Artificial Sequence oligonucleotide	
232	<400> SEQUENCE: 4	
233	agtgtatgctg atggggagaa tgggttgtt ggt	33
236	<210> SEQ ID NO: 5	
237	<211> LENGTH: 33	
238	<212> TYPE: DNA	
239	<213> ORGANISM: Artificial Sequence	
241	<220> FEATURE:	
242	<223> OTHER INFORMATION: Artificial Sequence oligonucleotide	
244	<400> SEQUENCE: 5	
245	agtgtatgctg atgggacaaa tgggttgtt ggt	33
248	<210> SEQ ID NO: 6	
249	<211> LENGTH: 33	

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Output Set: N:\CRF4\01302007\J570904B.raw

250 <212> TYPE: DNA
 251 <213> ORGANISM: Artificial Sequence
 253 <220> FEATURE:
 254 <223> OTHER INFORMATION: Artificial Sequence oligonucleotide
 256 <400> SEQUENCE: 6
 257 agtgatgctg atggatgaa tggttgtta ggt 33
 260 <210> SEQ ID NO: 7
 261 <211> LENGTH: 33
 262 <212> TYPE: DNA
 263 <213> ORGANISM: Artificial Sequence
 265 <220> FEATURE:
 266 <223> OTHER INFORMATION: Artificial Sequence oligonucleotide
 268 <400> SEQUENCE: 7
 269 agtgatgctg atgggggaa tggttgtta ggt 33
 272 <210> SEQ ID NO: 8
 273 <211> LENGTH: 33
 274 <212> TYPE: DNA
 275 <213> ORGANISM: Artificial Sequence
 277 <220> FEATURE:
 278 <223> OTHER INFORMATION: Artificial Sequence oligonucleotide
 280 <400> SEQUENCE: 8
 281 agtgatgctg atggaaagaa tggttgtta ggt 33
 284 <210> SEQ ID NO: 9
 285 <211> LENGTH: 33
 286 <212> TYPE: DNA
 287 <213> ORGANISM: Artificial Sequence
 289 <220> FEATURE:
 290 <223> OTHER INFORMATION: Artificial Sequence oligonucleotide
 292 <400> SEQUENCE: 9
 293 gaccaaggc gtaatattt agcttatctg ttc 33
 296 <210> SEQ ID NO: 10
 297 <211> LENGTH: 33
 298 <212> TYPE: DNA
 299 <213> ORGANISM: Artificial Sequence
 301 <220> FEATURE:
 302 <223> OTHER INFORMATION: Artificial Sequence oligonucleotide
 304 <400> SEQUENCE: 10
 305 gaccaaggc gtaatgtatt agcttatctg ttc 33
 308 <210> SEQ ID NO: 11
 309 <211> LENGTH: 33
 310 <212> TYPE: DNA
 311 <213> ORGANISM: Artificial Sequence
 313 <220> FEATURE:
 314 <223> OTHER INFORMATION: Artificial Sequence oligonucleotide
 316 <400> SEQUENCE: 11
 317 gaccaaggc gtaatgcatt agcttatctg ttc 33
 320 <210> SEQ ID NO: 12
 321 <211> LENGTH: 43
 322 <212> TYPE: DNA

RAW SEQUENCE LISTING DATE: 01/30/2007
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323 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Artificial Sequence oligonucleotide
328 <400> SEQUENCE: 12
329 cgaatcaggc acagcatact ccgactcagc aagagctcaa tag 43
332 <210> SEQ ID NO: 13
333 <211> LENGTH: 45
334 <212> TYPE: DNA
335 <213> ORGANISM: Artificial Sequence
337 <220> FEATURE:
338 <223> OTHER INFORMATION: Synthetic
340 <220> FEATURE:
341 <221> NAME/KEY: misc_feature /
342 <222> LOCATION: (17)..(25)
343 <223> OTHER INFORMATION: "n stands for any base"
346 <400> SEQUENCE: 13
W--> 347 gtaagaacag ataagcnnnn nnnnnacgac cttggtcacc aatcg 45
350 <210> SEQ ID NO: 14
351 <211> LENGTH: 40
352 <212> TYPE: DNA
353 <213> ORGANISM: Artificial Sequence
355 <220> FEATURE:
356 <223> OTHER INFORMATION: Artificial Sequence oligonucleotide
358 <400> SEQUENCE: 14
359 gatgctgatg ggcaaaatgg tttgttaggt tttgctttc 40
362 <210> SEQ ID NO: 15
363 <211> LENGTH: 38
364 <212> TYPE: DNA
365 <213> ORGANISM: Artificial Sequence
367 <220> FEATURE:
368 <223> OTHER INFORMATION: Synthetic
370 <220> FEATURE:
371 <221> NAME/KEY: misc_feature
372 <222> LOCATION: (7)..(15)
373 <223> OTHER INFORMATION: "n stands for any base"
376 <400> SEQUENCE: 15
W--> 377 actcacnnnn nnnnnaacct gaaatactgt ttccgcgc 38
380 <210> SEQ ID NO: 16
381 <211> LENGTH: 50
382 <212> TYPE: DNA
383 <213> ORGANISM: Artificial Sequence
385 <220> FEATURE:
386 <223> OTHER INFORMATION: Artificial Sequence oligonucleotide
388 <400> SEQUENCE: 16
389 ttaccgtca tcaaaaagatc atcagtctgg tcgtctcggtt attggccag 50
392 <210> SEQ ID NO: 17
393 <211> LENGTH: 52
394 <212> TYPE: DNA
395 <213> ORGANISM: Artificial Sequence

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. 17,18,19,20,21,22,23,24,25
Seq#:15; N Pos. ~7,8,9,10,11,12,13,14,15
Seq#:17; N Pos. 18,19,20,21,22,23,24,25,26
Seq#:19; N Pos. 16,17,18,19,20,21,22,23,24
Seq#:21; N Pos. 17,18,19
Seq#:30; N Pos. 16
Seq#:33; N Pos. 16
Seq#:34; N Pos. 16
Seq#:49; N Pos. 17
Seq#:58; N Pos. 17
Seq#:60; N Pos. 17
Seq#:61; N Pos. 17
Seq#:62; N Pos. 17
Seq#:63; N Pos. 17
Seq#:69; N Pos. 19,20
Seq#:70; N Pos. 19,20
Seq#:71; N Pos. 19,20
Seq#:73; N Pos. 20,21,22
Seq#:74; N Pos. 20,21,22

VERIFICATION SUMMARY

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L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:347 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:407 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:437 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:467 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:581 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:623 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:641 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
L:827 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:941 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:0
L:971 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0
L:989 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0
L:1007 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0
L:1025 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:0
L:1103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:0
L:1121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:0
L:1139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0
L:1168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:0
L:1185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:0